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FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER SEFCHECK, GREGORY B	
			ART UNIT 2619	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/692,802

Applicant(s)

TAKABATAKE ET AL.

Examiner

Gregory B. Sefcheck

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-24 and 26-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-24 and 26-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/06)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

- Applicant's Amendment filed 10/3/2007 is acknowledged.
- Claims 8, 14, 20, 21, 24, 26, 29, 30, 32, and 33 have been amended. The previous objections to claims 14, 20, 24, 30, and 33 and the previous rejection of claims 29-31 under 35 USC 112, 2<sup>nd</sup> paragraph are withdrawn in light of the present amendments.
- Claims 1-7, 25, 35, and 36 have been previously cancelled.
- Claims 8-24 and 26-34 remain pending.

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 10, 23, 26, 29, and 32 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, and 8 of copending Application No. 11/030,061. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claims 10, 23, 26, 29, and 32 of the present application pertain to terminal devices having first and second interfaces while claim 1 of the copending application pertains to a system having first and second terminals and claim 8 of the copending application pertains to a method of operating a system having first and second terminals.

Claims 26, 29, and 32 of the present application pertain to terminal devices having first, second and third interfaces while claim 5 of the copending application pertains to a system having first, second, and third terminals.

However, the functionality of the system and method of claims 1, 5, and 8 in the copending application is the same as that of claims 10, 23, 26, 29, and 32 of the present application when considered in light of the specification and given the plain meanings of the claimed language.

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the terminal device having first and second interfaces of the present application as a system having first and second terminals, as shown in 11/030,061, since both the system and terminal function in the same manner regardless of the terminology used to describe them.

Further, even though claims 26, 29, and 32 of the present application are broadened by omitting the limitation of "completing/carrying out a prescribed authentication/admission procedure" in claim 5 of 11/030,061, it has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. In re Karlson, 136 USPQ 184(CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969); omission of a reference element whose function is not needed would be an obvious variation.

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the terminal device of the current application where an authentication/admission procedure is performed, as shown in 11/030,061, since the method of the current application functions to determine delivery packets to a first terminal or interface through a first network through control of a second terminal or interface.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 26-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The amendments to claim 26 render the claim indefinite. It is unclear how the added limitation of the claimed terminal "transmitting prescribed information to the first network on behalf of the first terminal" is related to or impacts the previous limitation of carrying out a "transfer of packets from a third device to a first terminal through the first network". It appears that these are two separate operations with no clear relationship within the claim.

Similarly, the amendments to claims 29 and 32 render the claims indefinite. It is unclear how the added limitation of the second/first terminal "transmitting prescribed information to the first network on behalf of the first/own terminal" is related to or impacts the previous limitations of the "control unit" in each claim, respectively.

In general, the interchanging use of the variously claimed terminals and networks in the different claim families creates confusion as to how the claimed operations are performed.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 8 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Ikegami (US006393032B1).

- Regarding Claims 8 and 21,

Ikegami discloses a wireless LAN system and method (Title). Referring to Figs. 2 and 4, Ikegami discloses a wireless terminal equipped to perform 802.11 transmission according to a standardized (slower) rate and a high-speed rate (first and second networks). Fig. 2 of Ikegami shows that antenna 17 and RF processor 14 are connected to either the high speed modem 11 (considered together meets claim 8,21 – first interface for packet transmission/reception with first radio network according to 802.11) or to the standardized modem 12 (meets claim 8,21 – second interface for packet transmission and reception with second radio network slower than first network).

Ikegami discloses that the data processor (control unit) 13 of the terminal utilizes the standardized modems 12 (second interface) for exchanging RTS/CTS (prescribed procedure) with another terminal, such that the another terminal is designated as the receiver of a subsequent high-speed data transfer through the high-speed modem 11 (first interface; Col. 5, lines 24-41; meets claim 8 – control unit to carry out communications with another terminal through second interface by a prescribed procedure required in using the another terminal as a receiving side in the first network).

Ikegami also discloses that the terminal can also similarly be the designated receiver of a high-speed data transfer (Col. 6, lines 6-31; claim 21 – control unit to carry

out communications with another terminal through second interface by a prescribed procedure required in using own terminal as a receiving side in the first network).

Ikegami shows RTS frame includes (prescribed) information about the duration of the pending high-speed transfer so all data transmissions over both the standardized and high-speed modems (first and second networks) cease for the specified duration, thereby enabling data frame (packets) to be communicated through the high-speed modems 11 and received by the another/own terminal without interference (Col. 5, lines 49-63; Col. 7, lines 34-41; meets claim 8,21 – transmit a prescribed information to the first network by the another/own terminal).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



8. Claims 8-24, 26, 27, and 29-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US006484028B2), hereafter Okada, in view of Boer et al. (US005706428A), hereafter Boer.

- Regarding Claims 8,

Okada discloses an information delivery system (Title). Referring to Fig. 3, Okada discloses user center 3 (claim 8 - terminal device) which can transmit and receive with terminal 1 (another terminal) over network 2 (second network) and transmit to terminal 1 over satellite network 7 (first network) (meets claim 8 - terminal device having first interface for transmitting over first network; claim 8 - second interface for transmitting/receiving over second network).

Okada shows that the user center 3 contains a control unit, such as WWW processing unit 31 and automatic collaboration unit 32, for managing communication to be received by terminal 1 over the satellite network based upon the user center 3 forwarding a request (prescribed information) received from terminal 1 through network 2 (second network) such that delivery of data to terminal 1 over the satellite network can be carried out (meets claim 8 - control unit to carry out communications with another terminal through second interface by a prescribed procedure required in using the another terminal as a receiving side in the first network; claim 8 - transmit a prescribed information to the first network on behalf of the another terminal required in order for the another terminal to receive packets through the first network; Okada: Col. 4, lines 22-45, 58-65; Col. 5, 15-26; Col. 5-6, lines 62-37).

Okada discloses use of the satellite network for communication of larger sized data files, but fails to expressly disclose a faster IEEE 802.11 standard network, and also fails to disclose that the intranet is a radio network.

Boer discloses an IEEE 802.11 wireless LAN that discloses mobile stations that may transmit and receive at a plurality of data rates, including higher rates that are not yet in accordance with the standard (col. 1, lines 9-30 and col. 2, lines 34-53; meets claim 8 – first network being a 802.11 radio network; claim 8 – second network slower than first network).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize high-speed wireless networks that can achieve higher-than-standard rates, as shown by Boer, in order to accommodate a more flexible and adaptive corporate intranet-type network while also accommodating the transport of large, unidirectional data files to client terminals such as those in Okada.

- Regarding Claim 21,

Okada discloses an information delivery system (Title). Referring to Fig. 3. Okada discloses terminal 1 (claim 21 – terminal device) which can transmit and receive with user center 3 (another terminal) over network 2 (second network) and receive only over satellite network 7 (first network) (meets claim 21 – terminal device having first

interface for receiving over first network; claim 21 – second interface for transmitting/receiving over second network).

Okada shows that the terminal 1 controls communication by sending a request over network 2 to user center 3 such that delivery of data to terminal 1 over the satellite network can be carried out (meets claim 21 – control unit to carry out communications with another terminal through second interface by a prescribed procedure required in using own terminal as a receiving side in the first network; claim 21 – transmit a prescribed information to the first network on behalf of the own terminal required in order for the own terminal to receive packets through the first network; Okada: Col. 4, lines 22-45, 58-65; Col. 5, 15-26; Col. 5-6, lines 62-37).

Okada discloses use of the satellite network for communication of larger sized data files, but fails to expressly disclose a faster IEEE 802.11 standard network, and also fails to disclose that the intranet is a radio network.

Boer discloses an IEEE 802.11 wireless LAN that discloses mobile stations that may transmit and receive at a plurality of data rates, including higher rates that are not yet in accordance with the standard (col. 1, lines 9-30 and col. 2, lines 34-53; meets claim 21 – first network being a 802.11 radio network; claim 21 – second network slower than first network).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize high-speed wireless networks that can achieve higher-than-standard rates, as shown by Boer, in order to accommodate a more flexible and adaptive

corporate intranet-type network while also accommodating the transport of large, unidirectional data files to client terminals such as those in Okada.

- Regarding Claim 26 (as best understood),

Okada discloses an information delivery system (Title). Referring to Fig. 3, Okada discloses a first terminal 1 which can transmit and receive over network 2 (second network) and receive only over satellite network 7 (first network) (meets claim 26 – first terminal having only reception function to a first network and transmission and reception function to a second network).

Okada shows that data transfer to the first terminal over the satellite network (first network) is carried out by and under control of the user center 3, having a transmit interface to the satellite network and a transmit/receive interface to network 2 (second network) and the Internet 4 (third network). Okada discloses the user center as providing the functions for controlling a data transfer within the overall terminal for carrying out the data transfer, thereby meeting both the terminal and second terminal, as claimed (meets claim 26 – terminal for carrying out data transfer to first terminal having interface for at least transmission to the first network and interface for transmission and reception with third network; claim 26 – second terminal for controlling data transfer to the first terminal that is connected to the second network and a third network different from the first and second networks).

Okada shows that the user center 3 contains a control unit, such as WWW processing unit 31 and automatic collaboration unit 32, for managing communication to

the first (receiving) terminal through the first network based upon user center 3 receiving a request from the first terminal through network 2 (second network) for delivery of data from terminal 5 (third device) through the Internet 4 (meets claim 26 --- control unit configured to receive and utilize control information from the second terminal through the third network and transfer packets from a third device on the third network to the first terminal through the first network; Okada: Col. 4, lines 22-45, 58-65; Col. 5, 15-26; Col. 5-6, lines 62-37).

Okada discloses use of the satellite network for communication of larger sized data files, but fails to expressly disclose a faster IEEE 802.11 standard network, and also fails to disclose that the intranet is a radio network.

Boer discloses an IEEE 802.11 wireless LAN that discloses mobile stations that may transmit and receive at a plurality of data rates, including higher rates that are not yet in accordance with the standard (col. 1, lines 9-30 and col. 2, lines 34-53; meets claim 26 – first network being a 802.11 radio network; claim 26 – second network slower than first network).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize high-speed wireless networks that can achieve higher-than-standard rates, as shown by Boer, in order to accommodate a more flexible and adaptive corporate intranet-type network while also accommodating the transport of large, unidirectional data files to client terminals such as those in Okada.

- Regarding Claim 29 (as best understood),

Okada discloses an information delivery system (Title). Referring to Fig. 3, Okada discloses a first terminal 1 which can transmit and receive over network 2 (second network) and receive only over satellite network 7 (first network) (meets claim 29 – first terminal having only reception function to a first network and transmission and reception function to a second network).

Okada shows that data transfer to the first terminal over the satellite network (first network) is carried out by and under control of the user center 3, having a transmit interface to the satellite network and a transmit/receive interface to network 2 (second network) and the Internet 4 (third network). Okada discloses the user center as providing the functions for controlling a data transfer within the overall terminal for carrying out the data transfer, thereby meeting both the terminal and second terminal, as claimed (meets claim 29 – terminal for controlling data transfer to first terminal having interfaces for transmission/reception with the second network and third network; claim 29 – second terminal connected to the first network and a third network different from the first and second networks).

Okada shows that the user center 3 contains a control unit, such as WWW processing unit 31 and automatic collaboration unit 32, for managing reception of data at the first terminal through the first network based upon user center 3 receiving a request from the first terminal through network 2 (second network) for delivery of data from terminal 5 (third device) through the Internet 4 (meets claim 29 – control unit configured to receive packets at the first terminal through the first network from a third

device on the third network by second terminal communicating with the first terminal through the second network and the third device through the third network ; Okada: Col. 4, lines 22-45, 58-65; Col. 5, 15-26; Col. 5-6, lines 62-37).

Okada discloses use of the satellite network for communication of larger sized data files, but fails to expressly disclose a faster IEEE 802.11 standard network, and also fails to disclose that the intranet is a radio network.

Boer discloses an IEEE 802.11 wireless LAN that discloses mobile stations that may transmit and receive at a plurality of data rates, including higher rates that are not yet in accordance with the standard (col. 1, lines 9-30 and col. 2, lines 34-53; meets claim 29 – first network being a 802.11 radio network; claim 29 – second network slower than first network).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize high-speed wireless networks that can achieve higher-than-standard rates, as shown by Boer, in order to accommodate a more flexible and adaptive corporate intranet-type network while also accommodating the transport of large, unidirectional data files to client terminals such as those in Okada.

- Regarding Claim 32 (as best understood),

Okada discloses an information delivery system (Title). Referring to Fig. 3, Okada discloses terminal 1 having an interface to transmit and receive over network 2 (second network) and receive interface with satellite network 7 (first network) (meets

claim 32 – terminal having receive interface to a first network and transmit/receive interface to a second network).

Okada shows that terminal 1 receives data (packets) over the satellite network (first network) from user center 3 (first terminal), which also has a transmit/receive interface (second terminal) to network 2 (second network) and the Internet 4 (third network). Okada discloses the user center as providing the functions for controlling a data transfer within the overall terminal for carrying out the data transfer, thereby meeting both the terminal and second terminal, as claimed (meets claim 32 – first terminal having at least transmission interface to the first network and transmission and reception interface with third network; claim 32 – second terminal having transmit/receive interface to the second network and a third network different from the first and second networks).

Okada shows that terminal 1 transmits a request for data from terminal 5 (third device on Internet 4) over network 2 to user center 3 (second terminal). Terminal 5 responds to the request by transmitting data through Internet 4 and through user center 3 (first terminal) to be received by terminal 1 over the satellite (first) (meets claim 32 – control unit configured to transmit request with respect to third device on the third network to second terminal through the second network and, in response to the request, receive packets from the third device relayed by the first terminal through the first network; Okada: Col. 4, lines 22-45, 58-65; Col. 5, 15-26; Col. 5-6, lines 62-37).



Okada discloses use of the satellite network for communication of larger sized data files, but fails to expressly disclose a faster IEEE 802.11 standard network, and also fails to disclose that the intranet is a radio network.

Boer discloses an IEEE 802.11 wireless LAN that discloses mobile stations that may transmit and receive at a plurality of data rates, including higher rates that are not yet in accordance with the standard (col. 1, lines 9-30 and col. 2, lines 34-53; meets claim 32 – first network being a 802.11 radio network; claim 32 – second network slower than first network).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize high-speed wireless networks that can achieve higher-than-standard rates, as shown by Boer, in order to accommodate a more flexible and adaptive corporate intranet-type network while also accommodating the transport of large, unidirectional data files to client terminals such as those in Okada.

- Regarding Claims 9, 11, 22, and 27 (as best understood),

Okada discloses an information delivery system that meets all limitations of the parent claims. Okada shows that the user center 3 contains a control unit, such as WWW processing unit 31 and automatic collaboration unit 32, for managing communication to the first (receiving) terminal through the first network based upon user center 3 receiving a request from the first terminal through network 2 (second network)

for delivery of data. Fig. 3 of Okada also shows use of destination address conversion units 33,34 for converting a destination provided with respect to the second network into an ID (address) of the satellite network (Col. 6, lines 15-41; meets claim 9,11 – control unit receives a transmission request and interface address of another terminal for carrying out packet reception through first network from the another terminal through the second interface and transmits the packets through the first interface towards the interface received from the another terminal according to the request; claim 22,27 – control unit notifies an interface address of the first interface to the another terminal through the second/third interface).

- Regarding Claims 10 and 23,

Okada discloses an information delivery system that meets all limitations of the parent claims. Okada shows that the user center 30 operates to authenticate a user at terminal 1 through network 2 before proceeding with data transfer over the satellite network (Col. 10-11, lines 63-4; Col. 14, lines 1-4; meets claim 10,23 – control unit also receives and carries out an authentication/admission request with respect to first network from the another terminal through second interface).

- Regarding Claim 12 and 13,

Okada discloses an information delivery system that meets all limitations of the parent claims. Okada discloses terminal 1 can issue the transmission request to the user center 1 or terminal 5 (source) can request data be forwarded by the user center 3

over the satellite network to terminal 1, utilizing resources of the satellite network corresponding to the requested data (Col. 6, lines 8-11, 15-31, 47-50; Col. 8, lines 41-47; Col. 14, lines 32-35; meets claim 12 – control unit transmits another packet transmission request from a source terminal to own terminal through the first network when the source terminal indicated in the request from another terminal is not the own terminal, receives the packets transmitted from the source terminal through the first network according to the another request and transfers the packets to the another terminal through the first interface; claim 13 – control unit receives and carries out a resource acquisition request with respect to first network from another terminal).

- Regarding Claim 14, 20, and 24,

Okada discloses an information delivery system that meets all limitations of the parent claims. Okada shows that the user center determines whether a data file requested through network 2 exceeds a predetermined amount when deciding (judging) whether the request should be transmitted over network 2 or the satellite network (Col. 5, lines 15-35; meets claim 14 – control unit judges whether a packet received from another terminal through the second interface contains control information for the first network and, if so, carries out processing corresponding to the control information; claim 20 – control unit judges whether other packets received through third interface should be relayed to the first or second interface according to whether the transfer route within own terminal is already set up; claim 24 – control unit attaches information indicating

that control information for the first network is contained to a packet transmitted through the second interface).

- Regarding Claim 15, 17, and 18,

Okada discloses an information delivery system that meets all limitations of the parent claims. Fig. 3 of Okada also shows use of a destination address conversion units 33,34, which stores an ID and address of the first and second network interfaces with respect to all terminals, for converting destination information between networks (Col. 4, lines 46-50; Col. 6, lines 15-41; claim 15,17,18 – control unit stores a correspondence between a first interface address and a second interface address of each terminal existing on the first and second networks).

- Regarding Claim 16,

Okada discloses an information delivery system that meets all limitations of the parent claim. Okada discloses a reception-control program that includes a delivery-result flag (Col. 13, line 47), but does not explicitly disclose transmitting an acknowledgement packet on behalf of the another terminal to confirm data has been received.

Boer discloses transmitting an acknowledgement message (packet) after data has been received by a terminal (Fig. 5, 6; Col. 5, lines 4-20; claim 16 – control unit transmits ACK to the first network on behalf of the another terminal which has received the packets).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Okada by transmitting an acknowledgement on behalf of terminal 1 to confirm the reception of data, as shown by Boer. This would ensure proper reception of data to the rest of the network even when the terminal is incapable of transmitting to the network.

- Regarding Claim 19,

Okada discloses an information delivery system that meets all limitations of the parent claim. Okada shows that the user center 3 control unit manages communication to the first terminal through the first network based upon a request from the first terminal through network 2 for delivery of data from terminal 5 through an interface to internet 4 (Fig. 3; meets claim 19 – third interface configured to carry out packet transmission and reception with respect to a third network different from the first and second networks; claim 19 – control unit sets up packet transfer route between first and third interfaces within own terminal according to prescribed control information received from another terminal through second interface).

- Regarding Claim 30 and 31 (as best understood),

Okada discloses an information delivery system that meets all limitations of the parent claim. Fig. 3 of Okada also shows use of destination address conversion units 33,34, which stores an ID and address of the first and second network interfaces with

respect to all terminals, for converting a destination between all three networks (Col. 4, lines 46-50; Col. 6, lines 15-41;

Okada further shows that the user center maintains a user table 36 in order to identify (check) a delivery request with respect to the various network address interfaces and conditions for each user (Col. 13-14, lines 61-13; meets claim 30 – control unit also receives an interface address of an interface of the second terminal for carrying out a packet transmission over first network from the first terminal through the second network, checks whether the interface address exists on the third network and returns a response indicating a result of checking to the first terminal through the second network; claim 31 – control unit transfers a packet with the interface address specified therein received from the first terminal through the second network towards the interface address through the third network).

- Regarding Claims 33 and 34 (as best understood),

Okada discloses an information delivery system that meets all limitations of the parent claim. Fig. 3 of Okada also shows use of destination address conversion units 33,34, which stores an ID and address of the first and second network interfaces with respect to all terminals, for converting a destination between all three networks (Col. 4, lines 46-50; Col. 6, lines 15-41; meets claim 33 – control unit receives an interface address of an interface of the first terminal for carrying out packet transmission and reception with the third network from the first terminal through the first network, and notifies the interface address to the second terminal through the second network; claim

34 – control unit transmits a packet with the interface address specified therein to the second terminal through the second network).

9. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okada in view of Boer as applied to claim 27 above, and further in view of Hanson et al. (US 20050223115A1), hereafter Hanson.

- Regarding Claim 28 (as best understood),

Okada discloses an information delivery system that meets all limitations of the parent claim.

Okada discloses the first network as a broadcasting satellite system, but does not explicitly disclose broadcasting the interface address through the first network.

Hanson discloses providing mobile and other intermittent connectivity in a computing environment (Title) in which nodes are identified in the overall network through DHCP messages in which a node's interface address is broadcast throughout the network (Pg. 19, paragraph 286; claim 28 – broadcasting the interface address through the first network).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Okada by broadcasting an interface address throughout the network, as shown by Hanson, thereby enabling the user center to dynamically maintain address conversion information for user's that require mobile service or other types of intermittent connectivity.

***Response to Arguments***

10. Applicant's arguments filed 10/3/2007 have been fully considered but they are not persuasive.

- In the Remarks on pg. 12 of the Amendment, Applicant contends Ikegami does not disclose a "terminal device transmits a prescribed information to the first network on behalf of another terminal", as in claims 8 and 21.
- The Examiner respectfully disagrees. Applicant's summation of Ikegami does not address portions of Ikegami cited in the claim rejections, above. Ikegami's cited disclosure pertains to utilizing terminal 10 as part of a wireless channel between two wireless terminals that are hidden from each other (see Fig. 4), utilizing RTS/CTS signaling through other terminals that are not hidden from each other. Therefore, the disclosure of Ikegami meets the contested claim limitation of transmitting (and receiving) "on behalf of another terminal", as broadly claimed and interpreted by the Examiner, and the rejections are proper.
- In the Remarks on pg. 12 of the Amendment, Applicant alleges that the RTS frame of Ikegami is voluntarily transmitted and, therefore, the beginning of a series of processing, whereas in claim 8, the beginning of a series of processing is from the another terminal.



- The Examiner respectfully disagrees. Applicant's argument relies upon features that are not recited in the rejected claims. Neither claim 8 nor claim 21 recite any limitations regarding the beginning point of a series of processing that differentiates the claims from the disclosure of Ikegami. The claimed "control unit" in each claim only recites a configuration to "carry out a prescribed procedure required in using the another/own terminal as a receiving side in the first network". The claims do not specifically recite a starting point in the prescribed procedure, or which terminal performs processing at a presumed starting point of the procedure. The claim rejections are proper based upon the explicitly claimed limitations.
- In the Remarks on pg. 13 of the Amendment, Applicant contends that the presently claimed "another terminal" in claim 8 and "terminal device" in claim 21 has only a function to receive data with respect to the first network and, therefore, is completely different from Ikegami.
- The Examiner respectfully disagrees. Claim 8 recites a first interface configured to carry out **at least** a packet transmission reception with respect to a first network, while claim 21 recites a first interface configured to carry out **at least** a packet reception with respect to a first network. Neither claim expressly limits the claimed interfaces to only those

functions, as argued by Applicant. Therefore, the claim rejections are proper.

- In the Remarks on pg. 13 of the Amendment, Applicant contends Okada fails to disclose a terminal device that transmits a prescribed information to a first network on behalf of another terminal, as in claims 8, 21, 26, 29, and 32, because the satellite network is a one-way transmission, therefore it is inherent that no information can be transmitted from terminal 1 to the satellite network.
- The Examiner respectfully disagrees. Applicant's argument relies on terminal 1 inherently not being able to transmit to satellite network 1. However, this arguments fails to address Okada's disclosure that the satellite network is a one-way connection to terminal 1 such that terminal cannot transmit **directly** to the satellite network. The cited portions of Okada in the above rejections refer to operation of Fig. 3, in which a request (interpreted as the claimed "prescribed information") from terminal 1 is transmitted to the satellite network 1 **indirectly**, through the user center 3 connected to terminal 1 over network 2. The request triggers the delivery of data to terminal 1 over the one-way transmission from satellite network 1, thereby meeting the claim limitation of transmitting a prescribed information to a first network on behalf of another terminal. Therefore, the rejections are proper.

- In the Remarks on pgs. 13-14 of the Amendment, Applicant contends Okada does not disclose three different terminal elements, including a source terminal that transmits packets through the first network. Applicant argues that terminal 5 (source terminal) in Okada is not connected to the satellite network (first network), but rather, is connected to the Internet.
- The Examiner respectfully disagrees. The language of claim 12 does not contain the limitations alleged by Applicant, i.e. a "source terminal connected to a first network". Claim 12 only requires that a source terminal transmit data over the first network towards another terminal through the claimed terminal device responsive to a request. Though Okada does show that terminal 5 is connected to the Internet, the cited disclosure indicates that a requested transmission from terminal 5 will traverse the satellite network (first network) through the user center 3 (terminal device) towards the destination (terminal 1). Therefore, the claimed limitations are met and the rejections are proper.

### ***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory B. Sefcheck whose telephone number is 571-272-3098. The examiner can normally be reached on Monday-Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Wing Chan*  
WING CHAN 12/31/07  
SUPERVISORY PATENT EXAMINER

GBS

11/29/07